777 12th Street, Third Floor

Sacramento, CA 95814

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

STATEMENT OF BASIS
ADMINISTRATIVE AMENDMENT OF
TITLE V FEDERAL OPERATING PERMIT

TITLE V PERMIT NO.:	TV2008-02-03A
FACILITY NAME:	THE PROCTER & GAMBLE MANUFACTURING CO.
FACILITY LOCATION:	8201 Fruitridge Road Sacramento, CA 95826
MAILING ADDRESS:	8201 Fruitridge Road Sacramento, CA 95826
RESPONSIBLE OFFICIAL:	Vernon Murdock Plant Manager 916-383-3800
CONTACT PERSON:	Justin Gorman Environmental Manager 916-381-9859
REVIEWING ENGINEER:	Ady R. Santos
DATE:	December 28, 2012

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A. PURPOSE OF THIS STATEMENT OF BASIS

The Title V Federal Operating Permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes that make the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "…statement that sets forth the legal and factual basis for the draft permit conditions". The purpose of this Statement of Basis is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this Statement of Basis, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

This Statement of Basis is limited to the permit actions evaluated under the SMAQMD New Source Review rule that were constructed and/or modified since the last Title V permit minor modification, TV2008-02-03.

B. PROPOSAL

The Procter & Gamble Manufacturing Co. (P&G) submitted an application for the modification of their Title V Federal Operating Permit (TV2008-02-03) which was issued on 4-30-2009. Since the last modification to this Title V permit on 12-30-2011, P&G recently implemented a change to their Methyl Ester and Glycerine Manufacturing Process which involved the replacement of Tank 532 with a larger capacity tank in the glycerine recovery area. There was no change in the material and process throughput conditions. This was authorized in SMAQMD's Authority to Construct permit (A/C 23262). The permit process change was evaluated in accordance with the Enhanced New Source Review requirements specified in SMAQMD Rule 207, Sections 305 and 401 - 408.

SMAQMD Rule 207, Section 202.5 states that a permit action that has complied with the procedural and compliance requirements stated above can incorporate into the Title V permit all the conditions in the related Authority to Construct. Therefore, this Title V permit revision is not deemed a modification but an administrative amendment.

C. PERMIT ACTIONS

The following permit actions have occurred since the initial issuance of Federal Operating Permit No. TV1996-02-01.

Permit Actions	Date Issued	Permit No.
Initial Title V Federal Operating Permit	04-27-1999	TV1996-02-01
1st Permit Renewal	04-30-2004	TV2004-02-01
1st Minor Modification	02-27-2009	TV2004-02-02
2nd Permit Renewal	04-30-2009	TV2008-02-01
1st Significant Modification	09-22-2009	TV2008-02-02
1st Minor Modification	12-30-2011	TV2008-02-03

Current Title V Permit Action
This Title V permit action, TV2008-02-03A, includes two administrative amendments to Title V Permit TV2008-02-03.

D. FACILITY DESCRIPTION

The Procter & Gamble Manufacturing Company Sacramento plant is an integrated industrial facility comprised of four primary process areas. The processes include: (1) physically refined vegetable oil process (PROP); (2) fatty acid process; (3) methyl ester and glycerine process; and (4) fatty alcohol process. The facility converts natural oils, such as coconut and palm kernel oil, to produce various products.

Emissions units associated with these process areas generally include storage and process tanks, bulk silos, reactors, process vessels, condensers, filters, separators, centrifuges, evaporators, distillation and stripping equipment, dryers, cooling towers, sumps, traps, and other miscellaneous process equipment. Air pollution control devices include scrubbers, baghouses and thermal oxidizers. In addition to the process area, other emissions units include natural gas-fired heaters and boilers, and emergency standby IC engine.

E. PROCESS DESCRIPTION

STORAGE TANK FARM
This is storage for raw materials, intermediates and finished products, including coconut oil, esters, fatty alcohols and fatty acids. The tank farm includes rail car and tank truck loading and unloading capability.

PHYSICALLY REFINED OIL PROCESS
Also known as 'PROP', this process removes contaminants from vegetable oils, preparing them for further processing into esters and glycerine. PROP employs filtration aids, filtration, steam stripping and vacuum to remove particles, free fatty acids and odor bodies from the oil, resulting in an intermediate known as refined, bleached and deodorized oil.

METHYL ESTER & GLYCERINE MANUFACTURING PROCESS
Vegetable oils, predominantly coconut and palm kernel, are reacted with methyl alcohol in the presence of sodium methylate. The glycerides which make up the oils react to form methyl esters and crude glycerine. The mixture of glycerine and esters are gravity separated, washed and dried prior to entering interim storage. The esters are fractionated into short chain (C6-C10) and long chain (C12-C18) blends for further processing into finished product. The glycerine is shipped to a P&G facility for final processing.

FATTY ALCOHOL MANUFACTURING PROCESS
Long chain methyl esters (C12-C18) are heated and pressurized prior to mixing with hydrogen and catalyst. The mixture reacts in a four-stage plug flow reactor, hydrogenating the ester to a fatty alcohol and liberating methanol. The methanol and excess hydrogen are recovered for reuse. The mixture of fatty alcohol and catalyst are separated by means of centrifuges and filters. The fatty alcohol mixture is fractionated into C12-C14 blend used for surfactant making and pure forms of cetyl and stearyl alcohol which find many uses in the chemical and cosmetic industries.

FATTY ACIDS MANUFACTURING PROCESS
Short chain methyl esters (C6-C10) are reacted with sodium hydroxide, liberating methanol and producing a soapy material. The soap is reacted with sulfuric acid to produce a fatty acid, water and sodium sulfate salt. Following washing and gravity separation, the fatty acid is vacuum dried and distilled to finished product. The methanol is dried and returned to the ester making process.

F. SIGNIFICANT EMISSIONS UNIT DESCRIPTION

SMAQMD PERMIT NO. 23262 – METHYL ESTER AND GLYCERINE MANUFACTURING PROCESS CONSISTING OF:

1. SODIUM METHOXIDE CATALYST MAKING PROCESS
   - A. METHANOL ANALYSIS TANK
   - B. SODIUM METHOXIDE INTERCHANGE
   - C. SODIUM METHOXIDE ANALYSIS TANKS
   - D. SODIUM METHOXIDE PUMP
   - E. SODIUM METHOXIDE COLUMN
   - F. SODIUM METHOXIDE REBOILER
   - G. DRY METHANOL FINAL CONDENSER
2. ESTER MAKING, FLASHING, WASHING AND DRYING PROCESS
   - A. ESTERIFICATION 1^{ST}, 2^{ND} AND 3^{RD} SETTLER MIXERS
   - B. ESTERIFICATION REACTOR
   - C. ESTERIFICATION 1^{ST}, 2^{ND} AND 3^{RD} SETTLERS
   - D. ESTER PUMP
   - E. ESTER FLASH INTERCHANGER
   - F. ESTER FLASH PREHEATER
   - G. ESTER FLASH TANK
   - H. ESTER FLASH COOLER
   - I. ESTER FLASH PUMP
   - J. ESTER WASH WATER COOLER
   - K. FOUR (4) ESTER WASH COLUMNS
   - L. ESTER DRYER
   - M. ESTER DRYER PUMP
   - N. ESTER DRYER CONDENSER
   - O. ESTER DRYER VACUUM SYSTEM
   - P. ESTER DRYER METHANOL CONDENSER
   - Q. ESTER DRYER CONDENSATE PUMP
3. LIGHT CUT ESTER FRACTIONATION PROCESS
   - A. LIGHT CUT ESTER PREHEATER
   - B. LIGHT CUT ESTER STILL
   - C. LIGHT CUT ESTER CONDENSER
   - D. LIGHT CUT ESTER VENT CONDENSER
   - E. SINGLE STAGE EJECTOR
   - F. LIGHT CUT ESTER PUMPS
   - G. LIGHT CUT ESTER PRODUCT COOLER
   - H. LIGHT CUT ESTER REBOILER
   - I. LIGHT CUT ESTER POT PUMPS
4. INTERMEDIATE ESTER FRACTIONATION PROCESS
   - A. INTERMEDIATE ESTER STILL
   - B. INTERMEDIATE ESTER CONDENSER
   - C. INTERMEDIATE ESTER VENT CONDENSER
   - D. HEAVY CUT ESTER DISTILLATE RECEIVER

E. INTERMEDIATE ESTER DISTILLATE PUMP
F. INTERMEDIATE ESTER COOLER
G. INTERMEDIATE ESTER REBOILER
H. INTERMEDIATE ESTER POT PUMPS
I. THREE (3) ESTER BOTTOMS TANKS
J. ESTER BOTTOMS TO REFINERY TANKS
K. TWO (2) ESTER FEED TO REFINERY TANKS
L. ESTER SCALE TANK
M. TWO (2) ESTER SWING TANKS
N. WCE BOTTOMS TANKS

5. ESTER FRACTIONATION PROCESS
   A. ESTER STILL
   B. ESTER CONDENSER
   C. ESTER VENT CONDENSER
   D. ESTER DISTILLATE RECEIVER
   E. ESTER DISTILLATE PUMP
   F. ESTER COOLER
   G. ESTER REBOILER
   H. ESTER POT PUMPS
   I. FIVE (5) ESTER TO SCALE TANKS
   J. THREE (3) ESTERS TO HFA
   K. ESTER TO HFA TANK
   L. TWO (2) ESTERS TO LCFA TANKS
   M. FOUR (4) ESTERS TO LCFA/SCALES TANKS
6. METHANOL CONCENTRATOR PROCESS
   A. METHANOL CONCENTRATOR FEE/BOTTOMS INTERCHANGER
   B. METHANOL CONCENTRATOR
   C. METHANOL CONCENTRATOR BOTTOM PUMP
   D. METHANOL CONCENTRATOR RE BOILER
7. METHANOL CONCENTRATOR REBOILER
   A. ESTER VENT SEAL TANK
   B. METHANOL DRYER FEED TANK
   C. METHANOL DRYER FEED PUMP
   D. METHANOL DRYER INTERCHANGER
   E. METHANOL DRYER PUMP
   F. METHANOL DRYER
   G. WEST VENT CONDENSER
   H. WEST VENT FINAL CONDENSER
   I. METHANOL STORAGE TANK
   J. METHANOL CONDENSER
   K. METHANOL DISTILLATE TANK
   L. METHANOL DISTILLATE PUMP
8. GLYCERINE COLUMN PROCESS
   A. DRY GLYCERINE TANK
   B. DRY GLYCERINE FEED PUMP

C. GLYCERINE COLUMN
D. GLYCERING COLUMN PUMP
E. GLYCERINE COLUMN REBOILER
F. GLYCERINE INTERCHANGER
G. GLYCERINE BOTTOMS COOLER

9. GLYCERINE ACIDULATION AND NEUTRALIZATION PROCESS
   A. GLYCERINE ACIDULATION MIXER
   B. GLYCERINE ACIDULATION REACTOR/SETTLER
   C. ACIDULATED GLYCERINE PUMP
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   E. GLYCERINE NEUTRALIZATION MIXER
   F. ACIDULATED SOAPSTONE SURGE TANK
   G. ACIDULATED SOAPSTONE SURGE PUMP
10. GLYCERINE CONCENTRATION FEED TANK
   A. GLYCERINE EVAPORATOR FEED TANK
   B. GLYCERINE EVAPORATOR
   C. GLYCERINE EVAPORATOR REBOILER
   D. GLYCERINE EVAPORATOR PUMP
   E. GLYCERINE PRODUCT PUMP
   F. GLYCERINE EVAPORATOR CONDENSER
   G. GLYCERINE EVAPORATOR CONDENSER PUMP
   H. 3-STAGE EJECTOR
   I. GLYCERINE TO SHIPMENT TANK

SMAQMD PERMIT NO. 22794 – IC ENGINE STANDBY

IC ENGINE STANDBY, CUMMINS, MODEL CFP5E-F50, SERIAL NO. 73227471, 146 BHP @ 2100 RPM, 4.5 L DISPLACEMENT, DIESEL-FUELED, DRIVING AN EMERGENCY FIRE PUMP

G. INSIGNIFICANT EMISSIONS UNIT DESCRIPTION:

Equipment Description	Determination of Insignificant Emissions Unit is Based on SMAQMD "List and Criteria", Part B, Section 5 (Amended 4-26-01)
Combustion Equipment	List and Criteria [Part B, Section 5, IIB.1] Combustion equipment with a maximum heat input rating of no more than 5 MMBtu/hr and fired exclusively with natural gas, LP gas, or any combination thereof.
Internal Combustion Engine	List and Criteria [Part B, Section 5, IIB.2] Any piston-type internal combustion engine with a maximum continuous rating of no more than 50 bhp.
Printing and Reproduction Equipment	List and Criteria [Part B, Section 5, IID.1] Any printing, coating or laminating activity, which uses no more than 2 gallons per day of graphic arts materials, including inks, coatings, adhesives, fountain solutions, thinner, retarders, or cleaning solutions.
Storage Containers, Reservoirs and Tanks, and Transfer Equipment	List and Criteria [Part B, Section 5, IIG.2] Any equipment with a capacity of no more than 1,500 gallons used exclusively for the storage of gasoline. List and Criteria [Part B, Section 5, IIH.1] Any equipment used exclusively for the storage of unheated organic material with an initial boiling point of 302°F or greater; or a vapor pressure of no more than 5 mm Hg. List and Criteria [Part B, Section 5, IIH.2] Any equipment with a capacity of no more than 250 gallons used exclusively for the storage of unheated organic liquid. List and Criteria [Part B, Section 5, IIL.1] Any transfer equipment when used with the equipment described in Section 5 G-K.
Adhesive Application	List and Criteria [Part B, Section 5, IIM.1] Any adhesive operation in which no more than 173 gallons of adhesives are applied in a consecutive 12-month period.
Surface Coating	List and Criteria [Part B, Section 5, IIN.1] Any equipment or activity using no more than 1 gallon per day of surface coating, or any combination of surface coating and solvent, which contains either VOC or HAP, or both.

Equipment Description	Determination of Insignificant Emissions Unit is Based on SMAQMD "List and Criteria", Part B, Section 5 (Amended 4-26-01)
Solvent Cleaning	List and Criteria [Part B, Section 5, IIO.1] Any equipment or activity using no more than 1 gallon per day of solvent, or combination of solvent and surface coating, which contains either VOC or HAP, or both.
Abrasive Blasting	List and Criteria [Part B, Section 5, IIP.1] Any blast cleaning equipment using a suspension of abrasive material in water and the control equipment venting such blast cleaning equipment.
Laboratory Fume Hoods and Vents	List and Criteria [Part B, Section 5, IIW.1] Any laboratory fume hood or vent, provided such equipment is used exclusively for the purpose of teaching, research, or quality control.
Refrigeration Units	List and Criteria [Part B, Section 5, IIX.1] Any refrigeration unit provided the unit contains less than 50 lb. of refrigerant and is not used in conjunction with pollution control equipment.

H. ALTERNATIVE OPERATING SCENARIOS

There are no alternative operating scenarios identified in the Title V application.

I. ADMINISTRATIVE PERMIT AMENDMENTS

The administrative Title V permit amendments will include the modification to the methyl ester and glycerine manufacturing process and correcting the IC engine/fire pump specification.

1. SMAQMD PERMIT NO. 23262 – METHYL ESTER AND GLYCERINE MANUFACTURING PROCESS

The process modification involves the replacement of Tank No. 532. Tank No. 532 is located in the glycerine recovery area that serves as a glycerine acidulation reactor where the process stream primarily consists of soapy crude glycerine. The new Tank No. 532 has a larger capacity than the tank replaced. The bigger tank will prolong the residence time for the glycerine recovered from the glycerine column because of its increased working volume. Material and process throughput conditions remain unchanged.

As requested by P&G, this permit was reviewed and issued under the Enhanced New Source Review process. Thus, it has complied with the procedural requirements in SMAQMD Rule 207, Sections 401 through 408, that include, among others, the publication of the preliminary decision and allowing public comment after the preliminary decision was made. A written notification of the final action of the Air Pollution Control Officer was also published in the local newspaper. At the same time as the public comment period, EPA was given 45-days to review the Title V permit modification. No comments were received from the EPA and the public.

In accordance with SMAQMD Rule 207, Section 409, public notice is not required for an administrative Title V permit amendment.

2. SMAQMD PERMIT NO. 22794 – IC ENGINE STANDBY

The engine data for the fire pump engine were verified during the initial inspection of the unit and errors and omissions were confirmed as follows:

IC Engine Standby, Cummins, Model CFP5E-F50, Serial No. 73227471, 146 BHP @ 2100 RPM, 4.5 L (275 cu. in.), Diesel-fueled

This new emissions unit was included in the Title V minor modification, TV2008-02-03, but was not yet installed until after the issuance of the Title V permit. Therefore, this change is an administrative permit amendment because it is only a correction to the equipment description/identification.

In accordance with SMAQMD Rule 207, Section 409, public notice is not required for an administrative Title V permit amendment.

J. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS

FACILITY-WIDE REQUIREMENTS

SMAQMD RULE 101 – GENERAL PROVISIONS AND DEFINITIONS

SIP Approved: 3-19-1999 (64 FR 13514)
[9-03-1988 adopted version]

Rule Description: This rule provides definition of terms, specifies authority to arrest and specifies what data is public information.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 102 – CIRCUMVENTION

SIP Approved: 12-05-1984 (49 FR 47490)
[5-15-1972 adopted; 11-29-1983 renumbered version]

Rule Description: This rule prohibits concealment of emission and specifies how compliance determinations are made for combined and separated emissions.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 105 – EMISSION STATEMENT

SIP Approved: 5-26-2004 (69 FR 29880)
[9-05-1996 amended version]

Rule Description: This rule requires the facility to provide annual emission data for ROC and NOx.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 201 – GENERAL PERMIT REQUIREMENTS

SIP Approved: 7-13-1987 (52 FR 26148)
[11-20-1984 amended version]
The current 08-24-2006 version of this rule is not SIP-approved.

Rule Description: This rule provides an orderly procedure for the review of new sources of air pollution and of the modification and operation of existing sources through the issuance of permits.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 202 – NEW SOURCE REVIEW

SIP Approved: 6-19-1985 (50 FR 25417)
[11-20-1984 amended version]
The current 02-24-2005 version of this rule is not SIP-approved.

Rule Description: This rule sets the procedures for review of new and modified stationary sources and provides the mechanisms for evaluating the applicability of BACT and/or offset requirements.

Compliance Status: SMAQMD A/C No. 23262 was evaluated under SMAQMD Rule 202, Section 404 (Enhanced New Source Review). Accordingly, the applications were reviewed following the procedures specified in SMAQMD Rule 207, Sections 305 and 401 ~ 408 (Title V Federal Operating Permit Program). The Engineering Evaluation and draft Authorities to Construct were submitted to the U.S. EPA for a 45-day review. EPA did not provide any comment. SMAQMD A/C No. 22794 was issued on 1-26-11. This Title V minor modification was reviewed in Procter & Gamble's Title V permit, TV2008-02-03.

The permittee complies with the rule requirements.

SMAQMD RULE 207 – TITLE V FEDERAL OPERATING PERMIT PROGRAM

SIP Approved: 11-21-2003 (68 FR 65637)
[4-26-2001 amended version]

Rule Description: This rule sets forth the procedures for review, issuance, modification and renewal of Title V operating permits.

Compliance Status: The permittee has submitted a timely and complete permit application for Title V permit modification. The permittee complies with the rule requirements.

By complying with the procedure specified in SMAQMD Rule 202, Section 404 (Enhanced New Source Review), the minor modification to the methyl ester and glycerine manufacturing process will be incorporated into the Title V permit. The installation of a replacement IC engine driving the fire pump was incorporated in the Title V minor modification under TV2008-02-03. The updating of the serial number for the IC engine is considered as an administrative amendment to the Title V permit.

SMAQMD RULE 214 – FEDERAL NEW SOURCE REVIEW

SIP Approved: 7-20-11 (68 FR XXXXX)
[8-23-12 amended version]

Rule Description: This rule sets the procedures for review of new and modified major stationary sources and provides the mechanisms for evaluating the applicability of BACT and/or offset requirements.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 301 – PERMIT FEES - STATIONARY SOURCE *(Title V related fees only)*

SIP Approved: This rule is not SIP-approved but the portions of the rule related to Title V permit fees are applicable because they are part of the SMAQMD Title V Federal Operating Permit program approved by the U.S. EPA on 11-21-2003 (68 FR 65637).

Rule Description: This rule requires Title V sources to pay specified fees.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 307 – CLEAN AIR ACT FEES

SIP Approved: 8-26-2003 (68 FR 51184)
[9-26-2002 adopted version]

Rule Description: This rule requires major sources of ROC and NOx to pay specified fees beginning after the U.S. EPA determines that the SMAQMD has failed to demonstrate attainment of the one hour ozone ambient air quality standard by the attainment year.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 401 – RINGELMANN CHART

SIP Approved: 2-01-1984 (49 FR 3987)
[4-19-1983 amended version]

Rule Description: This rule limits the discharge of air contaminants into the atmosphere through visible emissions and opacity limitations.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 403 – FUGITIVE DUST

SIP Approved: 12-05-1984 (49 FR 47490)
[8-03-1977 adopted version]

Rule Description: This rule regulates operations which may cause fugitive dust emissions into the atmosphere.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 442 – ARCHITECTURAL COATINGS

SIP Approved: 11-09-1998 (63 FR 60214)
[9-05-1996 amended version]
The current 05-24-2001 version of this rule is not SIP-approved.

Rule Description: This rule limits the quantity of volatile organic compounds in architectural coatings supplied, sold, offered for sale, applied, solicited for application or manufactured for use within the SMAQMD.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 701 – EMERGENCY EPISODE PLAN

SIP Approved: 9-05-2000 (65 FR 53602)
[5-27-1999 amended version]

Rule Description: This rule requires a plan be prepared for specific actions to be taken when health related levels of ozone, carbon monoxide or PM10 are exceeded.

Compliance Status: The permittee complies with the rule requirements

EQUIPMENT-SPECIFIC REQUIREMENTS

SMAQMD RULE 404 – PARTICULATE MATTER

SIP Approved: 7-13-1987 (52 FR 26148)
[11-20-1984 amended version]

Rule Description: This rule limits the discharge of particulate matter into the atmosphere to 0.1 grains per dry standard cubic foot.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 406 – SPECIFIC CONTAMINANTS

SIP Approved: 12-05-1984 (49 FR 47490)
[12-06-1978 amended version]

Rule Description: This rule regulates emissions of sulfur compounds and combustion contaminants by limiting the emission concentration of: (a) sulfur compounds, calculated as sulfur dioxide (SO_2), to 0.2% by volume, and (b) combustion contaminants (PM) to 0.23 grams/dscm (0.1 grains/dscf) of gas calculated to 12% CO_2.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 411 – NOx FROM BOILERS, PROCESS HEATERS AND STEAM GENERATORS

SIP Approved: 8-01-2007 (72 FR 41894)
[10-27-2005 amended version]

Rule Description: This rule limits NOx and CO emissions from boilers, steam generator and process heaters with heat input ratings of 1 MMBTU/hour or greater.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 420 – SULFUR CONTENT OF FUELS

SIP Approved: 12-05-1984 (49 FR 47490)
[8-13-1981 amended version]

Rule Description: This rule regulates emissions of sulfur compounds from the combustion of fuels by limiting the sulfur content of the fuel. This rule limits the sulfur content of gaseous fuel to less than 50 grains per 100 cubic feet of sulfur compounds, calculated

as hydrogen sulfide.

Compliance Status: The permittee complies with the rule requirements.

SMAQMD RULE 443 – LEAKS FROM SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING

SIP Approved: 11-09-1998 (63 FR 60214)
[9-05-1996 amended version]

Rule Description: This rule limits emissions of VOCs from leaking components at chemical plants that manufacture synthetic organic chemicals and polymers.

Compliance Status: This rule specifies a Leak Detection and Repair (LDAR) program for fugitive VOC emitting components, including but not limited to flanges and affected devices (e.g. valves, pumps, compressors, pressure relief valves). The permittee has been implementing an LDAR program.

The permittee complies with the rule requirements.

SMAQMD RULE 464 – ORGANIC CHEMICAL MANUFACTURING OPERATIONS

SIP Approved: 4-19-2000 (65 FR 20912)
[9-25-2008 amended version]

Rule Description: This rule limits emissions of VOCs from organic chemical plants including but not limited to process tanks, reactors, distillation columns, crystallizers, evaporators, process tanks, centrifuges, filters, separators, and wastewater tanks.

Compliance Status: Section 301 – Reactors, Distillation Columns, Crystallizers, Evaporators or Centrifuges:

P&G operates numerous affected devices such as reactors, distillation columns and centrifuges where process vents to common emission points like the North Vent Seal Tank, South Vent Seal Tank and Fire Pit Stack. These emissions units have maximum allowable emissions limits that comply with the standards in Section 301.1. Compliance is verified by annual compliance source testing. Process modifications are in-progress and control devices have been installed in accordance with the applicable Federal MON regulation. The permittee complies with the applicable requirements.

Section 302 – Separation Operations: This section applies to

the operation of centrifuge, rotary vacuum filter or other devices with an exposed liquid surface.

P&G does not operate any device that is subject to this section.

Section 303 – Dryers or Production Equipment Exhaust Systems: Other equipment like dryers likewise vent to the common emission points mentioned above which have maximum allowable emissions limits that comply with the standards in Section 303.1.

The permittee complies with the applicable requirements.

Section 304 – Process Tanks: This section applies to process tanks with a VOC composite vapor pressure of greater than 26 mm HG at 20°C and which emits more than 15 lb/day of uncontrolled ROC emissions.

The standards in this section do not apply to P&G's process tanks because they do not fall within the conditions stated above. The permittee complies with this section.

Section 305 – Wastewater: This section prohibits the use of any equipment that receives, manages or treats wastewater with a VOC concentration of 500 ppm by weight or higher and a flow rate of greater than or equal to 1 liter per minute, or with a VOC concentration of 10,000 ppm per weight or higher at any flow rate, unless the equipment comply with the applicable standards.

P&G operates a system of open trench drains, sumps and two oil water separators that are subject to the requirements in Section 305. The permittee has complied with the inspection, monitoring and reporting requirements.
The permittee complies with the applicable requirements.

Section 306 – Liquid Transfer: This section applies to the transfer of liquids with a VOC composite partial vapor pressure of greater than 26 mm HG at 20°C into any tank truck, trailer, railroad tank car or storage tank with a capacity of 2,000 gallons or greater.

P&G's operations involve the transfer of methanol from process tanks into rail cars and vice versa. The transfer of methanol into the rail cars is controlled by passing the displaced vapor through two 60-gallon packed-bed scrubbers under SMAQMD Permit No. 12609. The APC Scrubbers were

determined to have achieved a combined system efficiency of at least 85% by weight and a control efficiency of at least 90% by weight.

The permittee complies with the applicable requirements.

Section 307 – Storage Tanks: This section applies to any storage tank with a capacity of either less than or equal to 40,000 gallons with a VOC composite partial vapor pressure greater than 78 mm Hg at 20°C (1.5 psi at 68°F).

Most of P&G's storage tanks in the tank farms have capacities greater than 40,000 gallons and store materials with a VOC composite partial vapor pressure of less than or equal to 78 mm Hg at 20°C (1.5 psi at 68°F).

These storage tanks are not subject to SMAQMD Rule 446, as well, because the vapor pressure of the materials stored are less than or equal to 1.5 psia under actual storage conditions.

The permittee complies with the applicable requirements.

Section 308 – Cleanup and Storage Requirements: The requirements of this section have been incorporated in the Title V permit. The future effective date requirement for the new VOC content limit for maintenance solvent cleaning shall likewise be included in the permit.

The permittee complies with the applicable requirements.

40 CFR 60, SUBPART VV – STANDARDS OF PERFORMANCE FOR EQUIPMENT LEAKS OF VOC IN THE SYNTHETIC ORGANIC CHEMICALS MANUFACTURING INDUSTRY

Promulgated: 10-18-1983

Rule Description: This subpart specifies a Leak Detection and Repair Program (LDAR) for affected facilities in the synthetic organic chemicals manufacturing industry (SOCMI) which were constructed, reconstructed or modified after 1-05-81 and on or before 11-07-06. Affected facilities are defined as process units that produce an intermediate or final product listed in Section 60.489. The facility's Methyl Ester/Glycerine Manufacturing process produces glycerine as a co-product. The process involves the transesterfication of tri-glycerides to methylated esters and glycerine. The process both consumes methanol as a reactant, which is later liberated, recovered and recycled

back into the process. The feedstock of the process unit is refined coconut oil (triglycerides).

Section 60.480(d)(3) exempts process units that produce heavy liquid chemicals only from heavy liquid feed. Heavy liquid chemicals are defined as mixtures with a vapor pressure of less than 0.3 kPa at 20°C or mixtures containing less than 20% by weight of a pure volatile organic substance with a vapor pressure greater than 0.3 kPa at 20°C. Coconut oil and glycerine meet the criteria of a heavy liquid. The methylated ester product contains a mix of esters ranging from C6 (methyl caproate) to C18 (methyl oleate). Only the C6 ester has a vapor pressure above the threshold. From information obtained from P&G, approximately 5% by weight of the C6 ester is present in the mixture. Therefore, the process is exempt from this regulation. However, P&G will still have to comply with the recordkeeping requirement specified in Section 486(i), by submitting a statement and analysis indicating that the raw materials, feedstock and products of the affected facility are exempt from the standards of this Subpart.

Compliance Status: The permittee complies with the rule requirements.

40 CFR 60, SUBPART NNN – STANDARDS OF PERFORMANCE FOR VOC EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY (SOCMI) DISTILLATION OPERATIONS

Promulgated: 6-29-1990

Rule Description: This subpart applies to each affected facility that is part of a process unit that produces any one of the chemicals listed in Section 60.667 as a product, co-product, by-product, or intermediate. The affected facilities consist of distillation units and recovery systems (stearyl still, scavenger still and two distillation columns) which were constructed, modified or reconstructed after 12-30-83.

Compliance Status: The permittee complies with the rule requirements.

40 CFR 60, SUBPART RRR – STANDARDS OF PERFORMANCE FOR VOC EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY (SOCMI) REACTOR PROCESSES

Promulgated: 8-31-1993

Rule Description: This subpart applies to each affected facility that is part of a process unit that produces any one of the chemicals listed in

Section 60.707 as a product, by-product, or co-product, or intermediate. The fatty alcohol manufacturing process produces mixed alcohols and the methyl ester/glycerine manufacturing process produces glycerine. The affected facilities consist of all reactors and recovery systems (ester reactors and fatty alcohol reactors) which were constructed, modified or reconstructed after 6-29-90.

Compliance Status: The permittee complies with the rule requirements.

40 CFR 60, SUBPART IIII – STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES

Promulgated: 7-11-2006

Rule Description This subpart applies to engines with a displacement of less than 30 liters per cylinder where the model year is 2007 or later for non-fire pump engines and the model year listed in Table 3 of the subpart or later year, for fire pump engines. It also applies to engines manufactured after April 1, 2006 for non-fire pump engines and engines manufactured as a certified National Fire Protection Association (NFPA) fire pump after July 1, 2006.

Compliance Status: The permittee complies with the rule requirements.

40 CFR 61, SUBPART V – NATIONAL EMISSION STANDARDS FOR EQUIPMENT LEAKS (FUGITIVE EMISSION SOURCES)

Promulgated: 6-06-1984

Rule Description: This subpart applies to pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, connectors, surge control vessels, bottoms receivers, and control devices or systems operating in volatile hazardous air pollutant (VHAP) service. Several of the facility's processes involve the use of methanol, a VHAP. Those devices transporting liquid or vapor consisting of 10% or greater methanol by weight are subject to this subpart. The entire facility, including devices in VHAP service is subject to the Enhanced Leak Detection and Repair Program (LDAR).

Compliance Status: The permittee complies with the rule requirements.

40 CFR 63, SUBPART F – NATIONAL EMISSION STANDARDS FOR ORGANIC HAZARDOUS AIR POLLUTANTS FROM THE SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY

Promulgated: 4-22-1994

Rule Description: This subpart provides applicability criteria for operators of chemical manufacturing process units where they :a) manufacture as a primary product one or more of the chemicals listed in Table 1 of the subpart; b) use as a reactant or manufacture as a product, or co-product, one or more of the organic hazardous air pollutants listed in Table 2 of the subpart; and c) are located at a site that is a major source with a potential to emit 10 TPY of any individual HAP and 25 TPY total HAPs. This subpart also includes provisions that are applicable in subparts G and H (the Hazardous Organic NESHAP).

P&G operates a process unit that produces methyl esters and glycerol from refined oil (triglycerides). The methyl esters are further processed into fatty acids and glycerol is purified and sold as a product. The reaction uses methanol, which is listed in Table 2, as a reactant. Of the two products in this process, only glycerol is listed in Table 1, as the methyl esters are C6 and higher. The term 'primary product' is not defined in this subpart or in subpart A. Glycerol was determined not to be a primary product of the process, but rather a co-product. This determination was made because the mass of methyl esters produced exceeds the mass of glycerine produced by several times and because other processes at the facility are designed to use methyl esters as a feed stock.

Compliance Status: The facility is not subject to this subpart, although it is referenced in other subparts of 40 CFR 63 that are applicable to P&G.

40 CFR 63, SUBPART Q – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR INDUSTRIAL PROCESS COOLING TOWERS

Promulgated: 9-08-1994

Rule Description: This subpart applies to all new and existing industrial cooling towers that are operated with chromium-based water treatment chemicals and are either major sources or are integral parts of facilities that are major sources. The cooling tower associated with the physically refined oil process does not use chromium-containing water treatment chemicals.

Compliance Status: The permittee complies with the rule requirements.

40 CFR 63, SUBPART FFFF – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING

Promulgated: 11-10-2003

Rule Description: This Miscellaneous Organic NESHAP (MON) subpart establishes emission standards for hazardous air pollutants from miscellaneous organic chemical manufacturing operations by establishing maximum achievable control technology (MACT) standards to site-specific process units. It also establishes requirements to demonstrate initial and continuous compliance with the emission limits, operating limits and work practice standards.

Compliance Status: The permittee complies with the rule requirements.

40 CFR 63 SUBPART ZZZZ – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES

Promulgated: 6-15-2004

Rule Description: This subpart establishes emission limitations and operating standards for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) operating at both major and area sources of HAP emissions. This applies to new and reconstructed RICE less than or equal to 500 HP. Additionally, the engine must comply with the requirements specified in 40 CFR 60 Subpart IIII.

Compliance Status: The permittee complies with the rule requirements.

K. TITLE V PERMIT CONDITIONS

It is recommended that The Procter & Gamble Manufacturing Co.'s Title V Federal Operating Permit be administratively amended.

Refer to the proposed Title V Federal Operating Permit No. TV2008-02-03A for the permit conditions.

APPROVED BY: _____ **DATE:** _____